

# Taxonomic study of the genus *Promalactis* Meyrick, 1908 (Lepidoptera: Oecophoridae) from Malaysia, including twelve new species

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**Abstract:** Based on the specimens collected in Mt. Trusmadi, Sabah, Malaysia, twenty-eight species of the genus *Promalactis* are recorded. Among them, twelve species are described as new: *P. apicibilobata* Wang sp. nov., *P. similitamdaoella* Wang sp. nov., *P. serriprocesa* Wang sp. nov., *P. quinacuspis* Wang sp. nov., *P. latericlavata* Wang sp. nov., *P. trigonilobata* Wang sp. nov., *P. curviunca* Wang sp. nov., *P. circulignatha* Wang sp. nov., *P. octacantha* Wang sp. nov., *P. folivalva* Wang sp. nov., *P. disparatunca* Wang sp. nov. and *P. magnifurcata* Wang sp. nov.; *P. trigonilancis* Kim, 2017 is newly recorded for Malaysia. Photographs and illustrations of adults and genitalia of the new species are provided, along with a list to all the known *Promalactis* species distributed in Malaysia.

**Key words:** Microlepidoptera; taxonomy; checklist

## 马来西亚锦织蛾属研究（鳞翅目：织蛾科）

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**摘要:** 报道马来西亚锦织蛾 28 种, 包括 12 新种: 端叶锦织蛾 *P. apicibilobata* Wang sp. nov., 拟三岛锦织蛾 *P. similitamdaoella* Wang sp. nov., 齿突锦织蛾 *P. serriprocesa* Wang sp. nov., 五突锦织蛾 *P. quinacuspis* Wang sp. nov., 棒突锦织蛾 *P. latericlavata* Wang sp. nov., 角突锦织蛾 *P. trigonilobata* Wang sp. nov., 弯爪锦织蛾 *P. curviunca* Wang sp. nov., 圆颚锦织蛾 *P. circulignatha* Wang sp. nov., 八齿锦织蛾 *P. octacantha* Wang sp. nov., 叶瓣锦织蛾 *P. folivalva* Wang sp. nov., 离爪锦织蛾 *P. disparatunca* Wang sp. nov. 以及壮叉锦织蛾 *P. magnifurcata* Wang sp. nov.; 1 新纪录种: 角瓣锦织蛾 *P. trigonilancis* Kim, 2017。提供了新种的成虫及外生殖器特征图, 给出了马来西亚锦织蛾属名录。

**关键词:** 小蛾类; 分类; 名录

## Introduction

The genus *Promalactis* is one of the largest genera of the family Oecophoridae. Two hundred and ninety-nine species have been described to date (Wang *et al.* 2015; Wang & Jia 2018; Kim *et al.* 2018). This highly diverse genus is characterized by the forewings with ground color being various shades of yellow, mostly with simple and conspicuous white and dark markings.

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The species diversity of *Promalactis* is very high in Malaysia. Based on the sporadic field collection, sixteen species had been described from this country prior to this study (Lvovsky 2000; Wang *et al.* 2013).

This paper describes 12 new species, part of our collecting expedition to Mt. Trusmadi (5.44°N, 116.45°E), Sabah, Malaysia in February and July, 2018. Among these species, *P. apicibilobata* Wang sp. nov., *P. similitamdaoella* Wang sp. nov., *P. serriprocessa* Wang sp. nov., *P. quinacuspis* Wang sp. nov., *P. latericlavata* Wang sp. nov. and *P. trigonilobata* Wang sp. nov. (Fig. 1) are characterized by the forewing having a white costal spot, two white fasciae, a dark tornal spot, and a white or dark apical spot; *P. curviunca* Wang sp. nov., *P. circulignatha* Wang sp. nov., *P. octacantha* Wang sp. nov. and *P. folivalva* Wang sp. nov. (Fig. 2) are similar to the above-mentioned new species in their forewing patterns, but differ by having a white oblique dorsal streak. These similar forewing patterns make these species almost inseparable from each other superficially, hence their separation is mainly based on the genital structures.

## Material and methods

Specimens were collected by light traps on Mt. Trusmadi, Sabah, Malaysia, from 11–16, February and 16–24, July in 2018. Photographs of adults were taken with a Leica M205A stereomicroscope plus Leica Application Suite 4.2 software, and photographs of genitalia were captured using a Leica DM750 microscope equipped with the same software. Genitalia dissection followed the methods introduced by Li (2002).

The type specimens are deposited in the Insect Collection of Nankai University, Tianjin, China.

## Abbreviations

BMNH—Natural History Museum, London, United Kingdom (Formerly the British Museum (Natural History))

MGCL—McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, University of Florida, Gainesville, USA

MNHU—Museum für Naturkunde der Humboldt Universität, Berlin, Germany

NKU—Insect Collection, Nankai University, Tianjin, China

RMNH—Naturalis Biodiversity Center, Leiden, The Netherlands (Formerly Rijksmuseum van Natuurlijke Historie or National Museum of Natural History)

SMNK—Staatliches Museum für Naturkunde, Karlsruhe, Germany

TL—Type locality

TD—Type depository

## Taxonomy

### Genus *Promalactis* Meyrick, 1908

Type species: *Promalactis holozona* Meyrick, 1908.

#### 1. *Promalactis apicibilobata* Wang sp. nov. (Figs. 1A, 3A, 5A)

**Diagnosis.** This new species can be distinguished from other closely related *Promalactis* species by the crab claw-like valva having a large square basal opening as long as half the length of the valva, and a bilobed apex with the dorsal lobe large triangular.

**Holotype.** ♂, **Malaysia**, Mt. Trusmadi, Sabah, Malaysia, 1223 m, 06-II-2018, coll. Mujie QI, slide No. JYY17620. **Paratypes.** 6♂14♀, 06–11-II-2018, other same data as holotype, slide Nos. JYY17641♂, JYY17626♂, JYY17617♂, JYY17624♀, JYY17664♀, JYY17902♀; 3♂2♀, 17–19-II-2018, coll. Kaijian Teng, other same data as holotype, slide Nos. JYY17866♂, JYY17867♂, JYY17878♂.



Figure 1. Adults of *Promalactis* spp. A. *P. apicibilobata* sp. nov., holotype, ♂; B. *P. similitamdaoella* sp. nov., holotype, ♂; C. *P. serripocessa* sp. nov., holotype, ♂; D. *P. quinacuspis* sp. nov., paratype, ♂; E. *P. latericlavata* sp. nov., holotype, ♂; F. *P. trigonilobata* sp. nov., holotype, ♂. Scale bars = 1.0 mm.

**Description.** Adult (Fig. 1A) wingspan 8.5–9.5 mm. Head with vertex and frons creamy white, mixed with silvery grey on frons, occiput dark yellowish brown. Labial palpus yellowish brown mixed with black, second segment orange yellow on inner surface, third segment black at apex. Antenna with scape white; flagellum black, dorsal surface annulated with white. Thorax and tegula dark yellowish brown. Forewing pale brownish yellow, with blackish brown and grey scales at apex; markings white edged with black scales: costal spot at distal 1/4, ovate, extending to above lower angle of cell; basal fascia slender, from base of fold to basal 1/4 of dorsum; antemedian fascia from basal 1/4 of costal margin to distal 2/5 of

dorsum, extending obliquely outward and parallel with basal fascia; tornal spot silvery grey, sparsely edged with black scales; cilia orange yellow except grey along distal part of costal margin and on extension of tornal spot. Hindwing and cilia brown. Fore- and midlegs white on dorsal side; ventral side black, with white tuft at apices of tibiae, with two white spots on fore tibia, tarsi white at apices of basal two tarsomeres; hindleg pale greyish brown, white at apex of each tarsomere.

Male genitalia (Fig. 3A). Uncus wide at base, narrowed to basal 2/5, with a large flap at each side basally, with an auricular ring at base linking uncus and gnathos; distal 3/5 slender, heavily sclerotized, rounded at apex. Gnathos lingulate, rounded at apex, with dense denticles. Tegumen branched from about middle, anterior half narrowed triangularly, narrowly rounded apically. Valva slightly narrower basally, widened medially, basal half with a large basal opening, sclerotized on costa, distal half setose, apex bilobed: dorsal lobe larger and longer, narrowed to rounded apex; ventral lobe small, triangular, pointed at apex. Saccus slightly narrowed basally, distinctly narrowed distally, narrowly rounded at apex, longer than uncus. Juxta weakly sclerotized; basal lobe slender, sclerotized, reaching middle of saccus. Aedeagus approximately 1.5 times length of valva, thickened distally, spatulate apically, with a small preapical hook; cornutus absent.

Female genitalia (Fig. 5A). Apophyses anteriores about half length of apophyses posteriores. Eighth sternum wrinkled, concave at middle on posterior margin, heavily sclerotized along concavity. Ductus bursae membranous, with a sclerotized circle beyond middle. Corpus bursae ovate, with granules and tiny denticles; signum being an ovate plate bearing several large and small denticles.

Distribution. Malaysia.

Etymology. The specific epithet of the new species is derived from the Latin *apic-* and *bilobatus*, referring to the valva being bilobed apically.

## 2. *Promalactis similitamdaoella* Wang sp. nov. (Figs. 1B, 3B, 5B)

Diagnosis. This new species is similar to *P. tamdaoella* Lvovsky, 1988 in the genital structures. It can be distinguished by the forewing with the antemedian fascia reaching the costal margin; the uncus having two equal distal lobes and the valva with a straight ventrodistal lobe in the male genitalia; and the lamella postvaginalis concave medially on the posterior margin. In *P. tamdaoella*, the antemedian fascia of the forewing does not reach the costal margin; the uncus has two denticles on the posterior margin and the ventrodistal lobe of the valva is angled outward at about basal 1/3; and the lamella postvaginalis is straight on the posterior margin.

**Holotype.** ♂, **Malaysia**, Mt. Trusmadi, Sabah, Malaysia, 1223 m, 06-II-2018, coll. Mujie QI, slide No. JYY17639. **Paratypes.** 4♂5♀, 06–11-II-2018, other same data as holotype, slide Nos. JYY17625♂, JYY17618♂, JYY17640♂, JYY17642♀, JYY17650♀, JYY17652♀, JYY17901♀, JYY17948♀; 12♂5♀, 17–22-II-2018, coll. Kaijian TENG, other data same as holotype, slide Nos. JYY17868♂, JYY17906♂, JYY17899♂, JYY17865♂, JYY17871♂, JYY17880♂, JYY17870♀.

Description. Adult (Fig. 1B) wingspan 8.5–9.5 mm. Head with vertex creamy white, frons silvery grey, occiput rust brown mixed with silvery grey. Labial palpus with second segment yellowish brown, third segment blackish brown except creamy white basally and

dorsodistally. Antenna with scape white; flagellum black, annulated with white on dorsal surface. Thorax and tegula rust brown. Forewing orange yellow to brownish yellow; markings white edged with black scales: costal spot at distal 1/3, ovate, extending to above lower angle of cell; basal fascia slender, from base of fold to basal 1/4 of dorsum; antemedian fascia from basal 1/4 of costal margin to distal 2/5 of dorsum, extending obliquely outward and parallel with basal fascia, widened anteriorly; tornal spot large, silvery grey, edged with black scales; apical spot silvery grey, edged with black scales, extending along termen to or near tornal spot; cilia orange yellow except deep grey along distal part of costal margin and on extension of tornal spot. Hindwing and cilia brown. Fore- and midlegs white on dorsal side; ventral side black, with white tuft at apices of tibiae, with two white spots on fore tibia, tarsi white at apices of basal two tarsomeres; hindleg pale greyish brown, tarsus greyish white, brown at apex of each tarsomere.

Male genitalia (Fig. 3B). Uncus rectangular, with a ventrobasal flap laterally; distal 1/6 deeply incised from apex in middle, forming two equal lobes with rounded apex, with a process or 1–2 denticles below margin of concavity. Gnathos digitate, heavily sclerotized, with denticles, narrowly rounded at apex. Tegumen branched from posterior 2/5, narrowed to rounded apex. Valva rectangular, narrowly parallel, with two elongate distal lobes equal in length: dorsal lobe wide at base, slightly narrowed to apex, with a large apical spine and a tuft of dense hairs at base of this spine; ventral lobe slender, clubbed, setose, rounded at apex. Costa heavily sclerotized, half as wide as valva. Saccus wide at base, narrowed to base of ventrodistal lobe. Saccus sub-triangular. Juxta weakly sclerotized, slightly widened distally; basal lobe slender, sclerotized, 3/5 length of saccus. Aedeagus approximately 1.2 times length of valva, produced to pointed apex; cornutus absent.

Female genitalia (Fig. 5B). Apophyses anteriores about 1/3 length of apophyses posteriores. Lamella postvaginalis sub-quadrata, deeply concave at middle on posterior margin, or widely and shallowly concave with denticles on posterior margin; lamella antevaginalis large, bowknot-shaped, shrunk at middle dorso-ventrally, with distinct horizontal folds. Eighth tergum sclerotized anteriorly, forming a narrow band; large process bearing several spines posterolaterally. Ductus bursae membranous, uniform, with a sclerotized circle at middle, bearing two denticles. Corpus bursae sub-ovate, with dense tiny denticles; signum being an ovate plate bearing several large spines and several small denticles.

Distribution. Malaysia.

Etymology. The specific epithet of the new species is derived from the Latin *simil-* and the name of another species, *tamdaoella*, referring to the similarity of the two species in the genital structures.

### 3. *Promalactis serriprocessa* Wang sp. nov. (Figs. 1C, 3C, 5C)

Diagnosis. This new species can be distinguished from other closely related species of the genus *Promalactis* by the uncus with a large sclerotized process arising from dorsodistal 1/3 and the costa having a long saw-like process in the male genitalia; the thickened ductus bursae being heavily and entirely sclerotized, and the doubled ovate signa in the female genitalia.

**Holotype.** ♂, **Malaysia**, Mt. Trusmadi, Sabah, Malaysia, 1223 m, 06-II-2018, coll. Mujie QI, slide No. JYY17623. **Paratypes.** 3♂2♀, 06–11-II-2018, other same data as holotype, slide Nos. JYY17619, JYY17667♂, JYY17950♀, JYY17663♀; 1♂2♀, 17–22-VII-2018, coll.

Kaijian Teng, other data same as holotype, slide Nos. JYY17879♂, JYY17869♀, JYY17905♀.

**Description.** Adult (Fig. 1C) wingspan 7.5–8.5 mm. Head with vertex and frons creamy white, mixed with silvery grey on frons, occiput pale rust brown. Labial palpus with second segment brown except white before apex dorsally, third segment black except creamy white at base and apex. Antenna with scape white; flagellum black, annulated with white on dorsal surface. Thorax and tegula pale rust brown. Forewing pale brownish yellow; markings white edged with black scales: costal spot placed before distal 1/3, inverted triangular, extending to before lower angle of cell; basal fascia slender, from base of fold to basal 1/4 of dorsum; antemedian fascia from basal 1/4 of costal margin to distal 2/5 of dorsum, extending obliquely outward and subparallel with basal fascia, almost uniform; tornal spot large, silvery grey, edged with black scales, touching costal spot anteriorly, with a white dot at its outside; apical spot white, sparsely edged with blackish brown scales, below apical spot situated a white dot on termen; cilia orange yellow, grey along distal part of costal margin and from middle of termen to tornus, white on extension of costal spot. Hindwing and cilia brown. Foreleg black, tibia with two white dots on ventral side and a white tuft at apex, tarsus white at apices of basal two tarsomeres; midleg with femur greyish brown, tibia and tarsus black, tibia with a white tuft at apex, tarsus white at apices of basal two tarsomeres; hindleg greyish brown, tarsus greyish white, brown at apex of each tarsomere.

**Male genitalia** (Fig. 3C). Uncus wide at base, narrowed to middle, widened from middle to before rounded apex, with a large sclerotized process arising from dorsodistal 1/3. Gnathos scoop-like, widened to before obtuse apex, sclerotized along lateral and anterior margins. Tegumen branched from anterior 1/3, narrowed to obtuse apex. Valva sub-rectangular, setose distally, rounded at apex; costa arched medially, produced to a small digitate process apically. Saccus sub-triangular, narrowed to rounded apex. Juxta weakly sclerotized, slightly widened distally, rounded on posterior margin; lateral process from about middle, its basal 1/4 slender and naked, widened at about basal 1/4, then narrowed to pointed apex, distinctly serrate from dorsal 1/4 to 3/4; basal lobe slender, clubbed, approximately 3/5 length of saccus. Aedeagus longer than valva, slender basally, thickened distally, with three differently shaped apical processes: dorsal process narrower, with a tooth at base, with fine spines apically; median process wider, somewhat serrate apically; ventral process shortest, being a sclerotized plate with denticles; cornutus absent.

**Female genitalia** (Fig. 5C). Apophyses anteriores about half length of apophyses posteriores. Lamella postvaginalis large, heavily sclerotized, deeply concave at middle on posterior margin, with a large cap-like median process, below this median process placed a large lunate plate. Antrum heavily sclerotized, widened anteriorly, much longer than ductus bursae, posterolaterally produced and narrowed outward. Ductus bursae shorter than corpus bursae, membranous. Corpus bursae ovate; with two large ovate signa bearing small denticles.

**Distribution.** Malaysia.

**Etymology.** The specific epithet of this new species is derived from the Latin *serr-* and *processus*, referring to the serrate lateral processes of the juxta.

#### 4. *Promalactis quinacuspis* Wang sp. nov. (Figs. 1D, 3D)

**Diagnosis.** This new species can be distinguished from other known species of the genus

by the aedeagus with five differently sized apical lobes and the lateral processes of the juxta with inner lobes slightly asymmetrical in the male genitalia.

**Holotype.** ♂, **Malaysia**, Mt. Trusmadi, Sabah, Malaysia, 1223 m, 06-II-2018, coll. Mujie QI, slide No. JYY17621.

**Description.** Adult (Fig. 1D) wingspan 10.0 mm. Head with vertex and frons creamy white, frons mixed with silvery grey, occiput pale rust brown. Labial palpus with second segment brown on outer surface, pale ochreous yellow on inner surface; third segment black except creamy white basally and apically. Antenna with scape white; flagellum black, annulated with white on dorsal surface. Thorax and tegula pale rust brown. Forewing pale brownish ochreous; markings white edged with black scales: costal spot placed at distal 1/3, inverted sub-triangular, crossing upper angle of cell; basal fascia slender, from above base of fold to basal 1/4 of dorsum; antemedian fascia from basal 1/4 of costal margin to distal 2/5 of dorsum, extending obliquely outward, slightly widened anteriorly, slightly arched outward, parallel with basal fascia; tornal spot large, silvery grey, edged with black scales, touching costal spot anteriorly; apical spot white, with sparse blackish brown scales; cilia grey except orange yellow tinged with black distally around apex. Hindwing and cilia brown. Fore- and midlegs black, fore tibia with two white dots on dorsal side and a white tuft at apex, mid tibia with a white tuft at apex, tarsi white at apices of basal two tarsomeres; hindleg greyish brown, tarsus greyish white except brown at apex of each tarsomere.

**Male genitalia** (Fig. 3D). Uncus sub-rectangular, with two preapical processes dorsally. Gnathos short, rocket-like, narrowly rounded apically, with granules; lateral arms wide. Tegumen branched from anterior 2/5, narrowed to obtuse apex. Valva narrowly elongate, widened from base to basal 2/3, distal 1/3 parallel, rounded at apex; costa straight; ventral margin concave before apex, with a digitate preapical process. Saccus narrow, reaching before distal 1/3 of ventral margin of valva apically. Saccus sub-triangular, narrowed to rounded apex. Juxta rectangular, weakly sclerotized, slightly widened distally; lateral process arising from base, its distal 3/5 bilobed: outer lobe slender, spine-shaped, pointed at apex; inner lobe wider, slightly asymmetrical: left inner lobe with two larger apical spines, serrate along inner margin distally, right inner lobe produced to an apical spine, weakly serrate along inner margin distally. Aedeagus longer than valva, thickened distally, with five differently sized, apex-pointed apical lobes; cornutus slender, shorter than half length of aedeagus.

Female unknown.

**Distribution.** Malaysia.

**Etymology.** The specific epithet of this new species is derived from the Latin *quina-* and *cuspis*, referring to the aedeagus with five spine-like apical lobes.

##### 5. *Promalactis latericlavata* Wang sp. nov. (Figs. 1E, 3E)

**Diagnosis.** This new species can be distinguished from other known *Promalactis* species by the sub-rectangular valva with the costa produced to a digitate process distally, and the juxta with clubbed lateral processes in the male genitalia.

**Holotype.** ♂, **Malaysia**, Mt. Trusmadi, Sabah, Malaysia, 1223 m, 06-II-2018, coll. Mujie QI, slide No. JYY17622. **Paratype.** 1♂, 11 February 2018, other same data as holotype.

**Description.** Adult (Fig. 1E) wingspan 7.5–8.0 mm. Head with vertex and frons creamy white, frons mixed with silvery grey, occiput yellowish brown. Labial palpus with second

segment brown except dorsal surface white preapically; third segment with basal half white, distal half black except creamy white apically. Antenna with scape white; flagellum black, annulated with white on dorsal surface. Thorax and tegula brownish yellow. Forewing pale brownish yellow; markings white edged with black scales: costal spot placed before distal 1/3, large and rounded, extending to before lower angle of cell; basal fascia slender, from above base of fold to basal 1/4 of dorsum; antemedian fascia straight, from basal 1/4 of costal margin to distal 2/5 of dorsum, extending obliquely outward, parallel with basal fascia, almost uniform; tornal spot large, silvery grey, edged with black scales, touching costal spot anteriorly; apical spot white, round, with sparse blackish brown scales on inner margin; cilia grey except orange yellow around apex and white on extension of apical spot. Hindwing and cilia brown. Fore- and midlegs black, fore tibia with two white dots on dorsal side and a white tuft at apex, mid tibia with a white tuft at apex, tarsi white at apices of basal two tarsomeres; hindleg missing.

Male genitalia (Fig. 3E). Uncus triangular, wide at base, narrowed to pointed apex, setose laterally. Gnathos spoon-like, scaly, rounded apically; gnathos arms much longer than gnathos, sclerotized along lateral margin. Tegumen branched from anterior 2/5, narrowed to obtuse apex. Valva sub-rectangular, setose distally; apex rounded, densely setose; costa convex medially, produced to a digitate process apically. Saccus sub-triangular, wide at base, narrowed to about distal 1/4, uniformly slender from distal 1/4 to rounded apex. Juxta sub-quadrate, weakly sclerotized, slightly widened distally; lateral process arising from about middle, clubbed, sparsely setose, as long as half length of valva; basal lobe slender, clubbed, about 3/4 length of saccus. Aedeagus longer than valva, uniform from basal 1/4 to before apex, produced apically; cornutus slender, shorter than half length of aedeagus.

Female unknown.

Distribution. Malaysia.

Etymology. The specific epithet of the new species is derived from the Latin *later-* and *clavatus*, referring to the shape of the lateral processes of the juxta.

#### 6. *Promalactis trigonilobata* Wang sp. nov. (Figs. 1F, 3F)

Diagnosis. This new species is similar to *P. superimposita* Wang, Du & Li, 2013 in the male genitalia, but it can be distinguished by the triangular dorsoapical lobe of the valva having a ventral denticle, which in contrast is sub-ovate and produced to a large spine-like ventral process in *P. superimposita*.

**Holotype.** ♂, **Malaysia**, Mt. Trusmadi, Sabah, Malaysia, 1223 m, 11-II-2018, coll. Mujie QI, slide No. JYY17649. **Paratypes.** 4♂, 07–11-II-2018, other same data as holotype, slide Nos. JYY17645♂, JYY17638♂.

Description. Adult (Fig. 1F) wingspan 9.0–10.0 mm. Head with vertex snowy white, frons silvery grey, occiput pale rust brown. Labial palpus with second segment orange yellow, third segment black except greyish white at apex. Antenna with scape white; flagellum black, annulated with white on dorsal surface. Thorax and tegula pale rust brown. Forewing orange yellow, covered with yellowish brown and blackish brown scales between fold and dorsum, with grey and blackish brown scales; markings white edged with black scales: costal spot placed beyond distal 1/3, inverted triangular, extending to above lower angle of cell; basal fascia slender, from base of fold to basal 1/5 of dorsum; antemedian fascia from basal 1/4 of



costal margin to distal 2/5 of dorsum, extending obliquely outward and subparallel with basal fascia, almost uniform; tornal spot silvery grey, edged with black scales; apical spot grey mixed with brown, ill-defined; cilia orange yellow, grey along distal part of costal margin and from middle of termen to tornus. Hindwing and cilia brown. Fore- and midlegs black, fore tibia with two white dots on ventral side and a white tuft at apex, mid tibia with a white tuft at apex, tarsi white at apices of basal two tarsomeres; hindleg greyish brown, tarsus greyish white except brown at apex of each tarsomere.

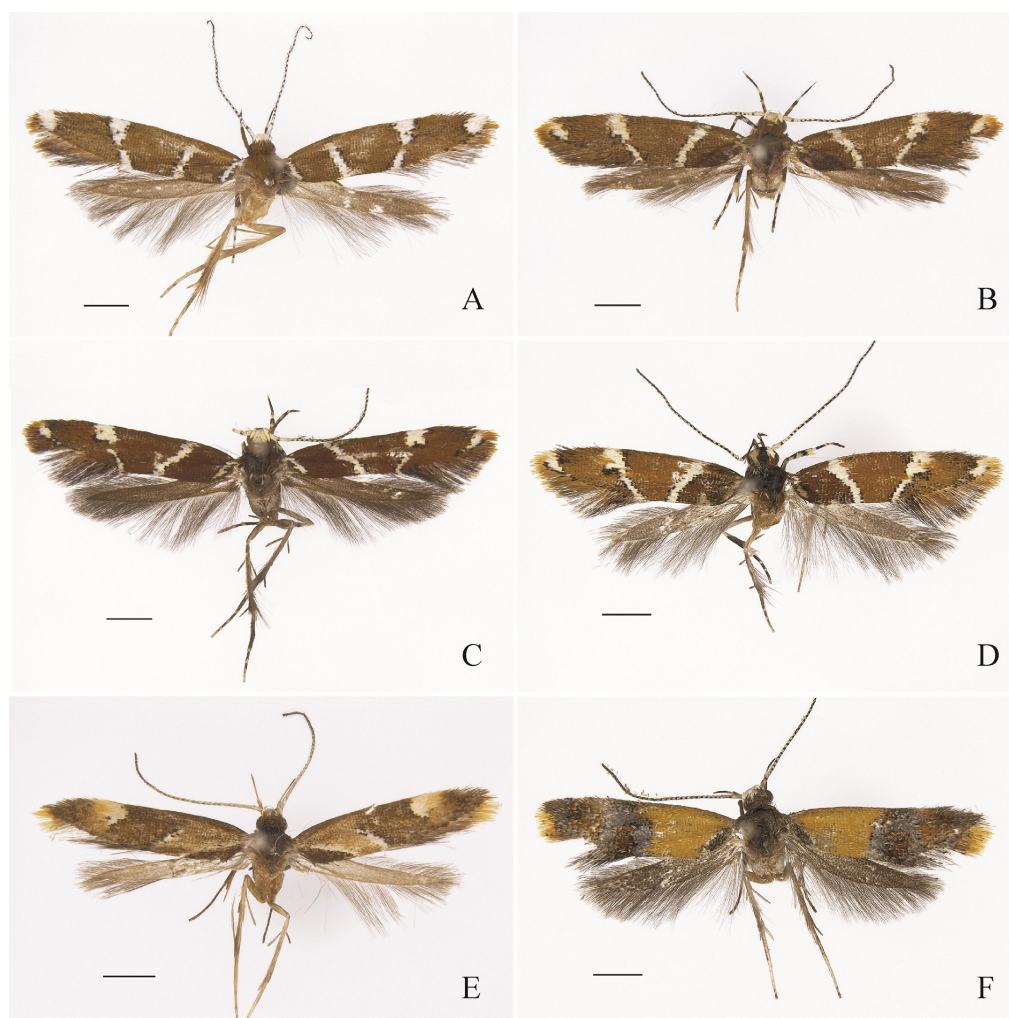


Figure 2. Adults of *Promalactis* spp. A. *P. curviunca* sp. nov., holotype, ♂; B. *P. circulignatha* sp. nov., holotype, ♂; C. *P. octacantha* sp. nov., holotype, ♂; D. *P. folivalva* sp. nov., holotype, ♂; E. *P. disparatunca* sp. nov., holotype, ♂; F. *P. magnifurcata* sp. nov., holotype, ♂. Scale bars = 1.0 mm.

Male genitalia (Fig. 3F). Uncus broad at base, gradually narrowed to middle, narrowly folded inward and setose laterally; distal half abruptly slender, digitate, hooked ventrad apically. Gnathos sub-triangular, distal 1/3 scobinate, with a small denticle apically; gnathos arms band-shaped, slightly shorter than gnathos. Tegumen extended elongately, branched from

middle, indistinctly narrowed to blunt apex. Valva elongate, sub-rectangular; costa weakly produced at middle; apex bilobed: dorsal lobe large, setose, widened triangularly to obtuse apex, with a ventroapical denticle; ventral lobe shorter than dorsal lobe, obtuse at apex. Sacculus with basal 3/5 narrow, smooth, distal 2/5 slightly widened, clubbed, densely setose, fused with ventroapical lobe distally. Saccus slender, rod-like, slightly longer than uncus, narrowly rounded at apex. Juxta small, nearly Y-shaped, acute anteriorly. Aedeagus with basal 2/3 straight, curved at distal 1/3, nearly as long as valva; cornutus spine-like, straight, less than 1/3 length of aedeagus.

Female unknown.

Distribution. Malaysia.

Etymology. The specific epithet of this new species is derived from the Latin *trigonus* and *lobatus*, referring to the shape of the dorsoapical lobe of the valva.

#### 7. *Promalactis curviunca* Wang sp. nov. (Figs. 2A, 4A)

Diagnosis. This new species can be distinguished from other closely related *Promalactis* species in the male genitalia by having an extremely elongate uncus, the absence of a gnathos, and an inverted short V-shaped tegumen.

**Holotype.** ♂, **Malaysia**, Mt. Trusmadi, Sabah, Malaysia, 1223 m, 08-II-2018, coll. Mujie QI, slide No. JYY17630.

Description. Adult (Fig. 2A) wingspan 10.0 mm. Head with vertex snowy white, frons silvery grey, occiput brownish yellow. Labial palpus with second segment brownish yellow, mixed with black scales dorsodistally; third segment black except greyish white basally and distally. Antenna with scape white; flagellum black, annulated with white on dorsal surface. Thorax and tegula pale rust brown. Forewing brownish yellow; markings white edged with black scales: costal spot placed at distal 1/3, inverted triangular, extending to above lower angle of cell; basal fascia slender, from above base of fold to basal 1/5 of dorsum; antemedian fascia from upper margin of cell at basal 1/4 of wing to beyond middle of dorsum, parallel with basal fascia, uniform; dorsal streak from before end of fold oblique outward to below costal spot; apical spot ovate; cilia yellow, mixed with greyish brown. Hindwing and cilia brown. Fore- and midlegs black, fore tibia with two white dots on ventral side and a white tuft at apex, mid tibia with a white tuft at apex, tarsi white at apices of basal two tarsomeres; hindleg yellowish, covered with greyish brown on femur and tibia dorsally, tarsus greyish brown at apex of each tarsomere.

Male genitalia (Fig. 4A). Uncus extremely elongate, approximately 2/3 as long as valva, wide at base, slightly narrowed to middle, slender and curved in distal half. Gnathos absent. Tegumen very short, inverted V-shaped. Valva elongate, subparallel from base to distal 1/4, then narrowing to apex; apex with a denticle directed dorsad. Sacculus wide at base, slightly narrowed distally, smooth in basal 3/5, densely setose in distal 2/5, fused with valva distally. Saccus with basal half wide and parallel laterally, distal half narrowed to rounded apex. Juxta fused for basal 1/3; lateral lobes curved and pointed at apex, asymmetrical: left lobe longer than right lobe, reaching about 3/4 length of uncus apically, right lobe reaching before middle of uncus, with two larger spines on lateral margin before apex, with indistinct denticles laterally; basal lobe slender, very short, no more than 1/8 length of uncus. Aedeagus straight, uniform, shorter than valva; two cornuti spine-shaped, straight, longer cornutus about 1/4

length of aedeagus, shorter cornutus less than 1/6 length of aedeagus.

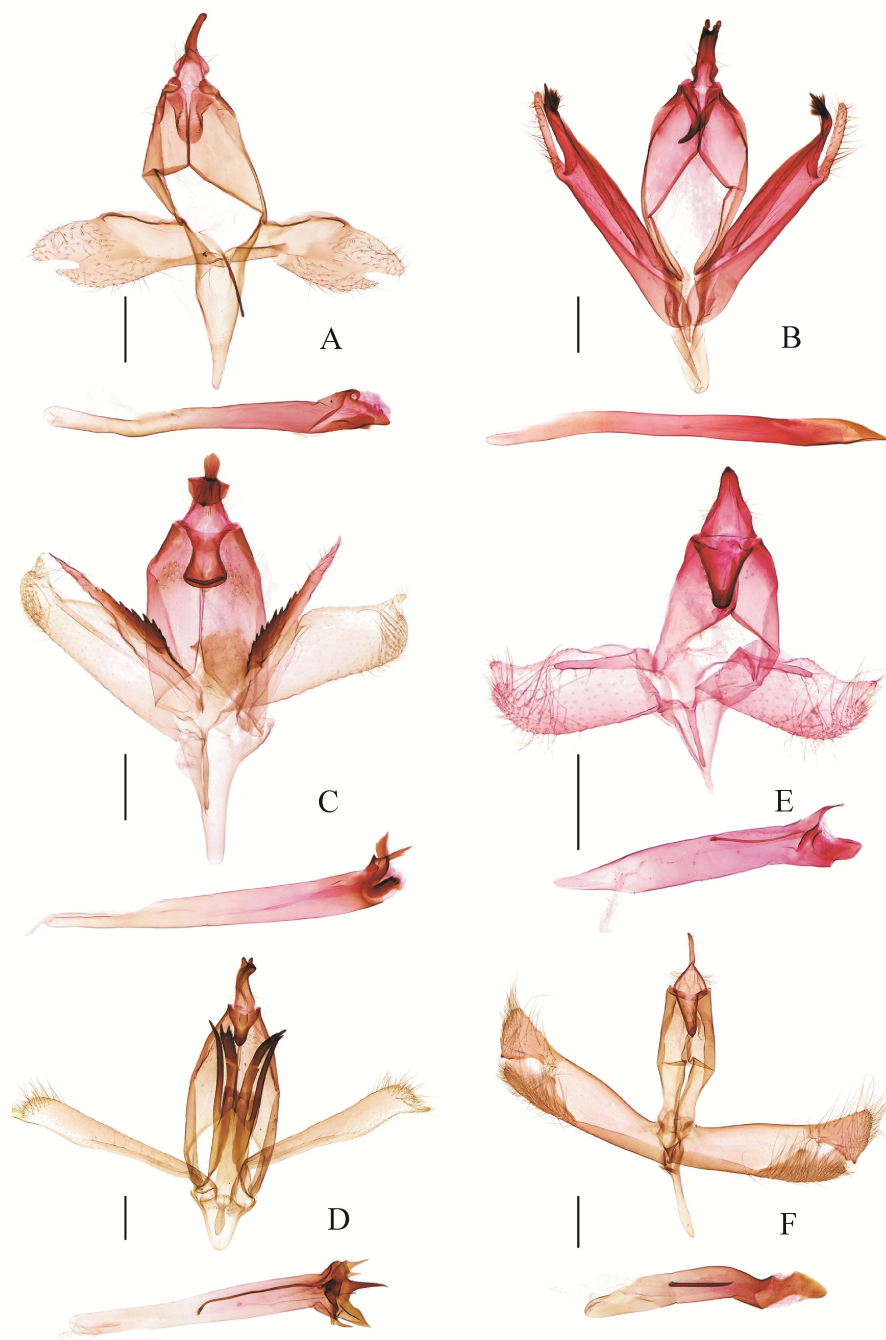


Figure 3. Male genitalia of *Promalactis* spp. A. *P. apicibilobata* sp. nov., holotype, slide No. JYY17620; B. *P. similitamdaoella* sp. nov., holotype, slide No. JYY17639; C. *P. serriprocesa* sp. nov., holotype, slide No. JYY17623; D. *P. quinacuspis* sp. nov., holotype, slide No. JYY17621; E. *P. latericlavata* sp. nov., holotype, slide No. JYY17622; F. *P. trigonilobata* sp. nov., paratype, slide No. JYY17649 Scale bars = 0.2 mm.

Female unknown.

Distribution. Malaysia.

Etymology. The specific epithet of this new species is derived from the Latin *curv-* and *uncus*, referring to the extremely elongate uncus.

#### 8. *Promalactis circulignatha* Wang sp. nov. (Figs. 2B, 4B)

Diagnosis. This new species can be distinguished in the male genitalia by having a narrow semicircular gnathos, and an aedeagus with one of the two cornuti bifurcated distally.

**Holotype.** ♂, **Malaysia**, Mt. Trusmadi, Sabah, Malaysia, 1223 m, 09-II-2018, coll. Mujie QI, slide No. JYY17656. **Paratype.** 1♂, 11-II-2018, other same data as holotype, slide No. JYY17657.

Description. Adult (Fig. 2B) wingspan 9.5 mm. Head with vertex snowy white, frons silvery grey, occiput brownish yellow. Labial palpus with second segment brown on outer surface, orange yellow on inner surface, creamy white before apex dorsally; third segment black except creamy white basally and distally. Antenna with scape white; flagellum black, annulated with white on dorsal surface. Thorax, tegula and forewing brownish yellow. Forewing with white markings edged with black scales: costal spot placed at distal 1/3, elongate ovate, extending obliquely inward to before and above lower angle of cell; basal fascia slender, from above base of fold to basal 1/5 of dorsum; antemedian fascia from before basal 1/4 of costal margin to basal 3/5 of dorsum, obliquely outward, parallel with basal fascia, uniform; tornal streak from before end of cell oblique outward to below costal spot, straight; apical spot small, ovate; cilia brownish yellow except orange yellow around apex. Hindwing and cilia brown. Fore- and midlegs white dorsally, black ventrally, fore tibia with two white dots on ventral side and a white tuft at apex, mid tibia with a white tuft at apex, tarsi white at apices of basal two tarsomeres and distal tarsomere; hindleg earth yellow ventrally, greyish brown dorsally.

Male genitalia (Fig. 4B). Uncus short, narrowed to rounded apex, with setae laterally. Gnathos narrow, semicircular. Tegumen wide posteriorly, distinctly narrowed anteriorly, with a conic ventral plate along midline on posterior 2/5 formed by overlap of inner margins. Valva rectangular, basal 2/3 with a large opening, distal 1/3 more sclerotized; apex almost straight, produced to a triangular process dorsoapically, serrate anteriorly. Costa with basal half membranous. Sacculus uniform, more than 1/3 width of valva, smooth basally, densely setose distally. Saccus clubbed, narrowed to rounded apex. Juxta with lateral lobes narrow basally, rectangularly or quadrately widened distally, straight at apex, exceeding base of costa; basal lobe slender, very short, shorter than uncus. Aedeagus stout, uniform, almost as long as valva; two cornuti equal in length: basal cornutus wide at base, separated from basal 2/5, forming two distal spines, distal cornutus straight, spine-shaped.

Female unknown.

Distribution. Malaysia.

Etymology. The specific epithet of this new species is derived from the Latin *circul-* and *gnathos*, referring to the shape of the gnathos.

#### 9. *Promalactis octacantha* Wang sp. nov. (Figs. 2C, 4C, 5D)

Diagnosis. This new species can be distinguished from other known *Promalactis* species in the male genitalia by the left valva having a large round process at base of the costa and the

right valva produced to a triangular dorsoapical process, and in the female genitalia by the ductus bursae having eight large thorns.

**Holotype.** ♂, **Malaysia**, Mt. Trusmadi, Sabah, Malaysia, 1223 m, 10-II-2018, coll. Mujie QI, slide No. JYY17643. **Paratypes.** 2♂1♀, 06–11-VII-2018, coll. Kaijian TENG, other same data as holotype, slide Nos. JYY17904♂, JYY17653♀; 1♂, 20-VII-2018, coll. Kaijian TENG, other same data as holotype, slide No. JYY17951♂.

**Description.** Adult (Fig. 2C) wingspan 9.5 mm. Head with vertex creamy white, frons silvery grey, occiput rust brown. Labial palpus with second segment rust brown on outer surface, orange yellow on inner surface, with a white dot dorsally before apex; third segment black except white basally and distally. Antenna with scape creamy white; flagellum blackish brown, annulated with white on dorsal surface. Thorax and tegula rust brown. Forewing rust yellow, darker between basal and antemedian fasciae, greyish black from beyond costal spot to before apical spot along costal margin, with black scales along termen and on tornus; markings white edged with black scales: costal spot placed at distal 1/3, sub-rounded, extending to upper angle of cell; basal fascia slender, from above base of fold to basal 1/5 of dorsum; antemedian fascia from before basal 1/4 of costal margin to basal 3/5 of dorsum, obliquely outward, slightly sinuate, parallel with basal fascia, uniform; dorsal streak from before end of fold oblique outward to lower margin of cell before lower angle, straight; apical spot small, ovate; cilia brownish yellow except orange yellow around apex. Hindwing and cilia dark brown. Fore- and midlegs white dorsally, black ventrally, fore tibia with a white dot on ventral side and a small white tuft at apex, mid tibia with a white tuft at apex, tarsi white at apices of basal two tarsomeres and apical tarsomere; hindleg with femur and tibia brown, tarsus blackish brown except white at apex of each tarsomere.

**Male genitalia** (Fig. 4C). Uncus wide at base, narrowed to distal 1/5, then widened to straight apex, with setae laterally. Gnathos large, quadrate; gnathos arms about twice length of gnathos. Tegumen broad V-shaped, rounded anteriorly. Valva asymmetrical, left valva: basal 2/3 quadrate, distal 1/3 narrowed to narrowly rounded and setose apex; costa with a large round process at base; sacculus narrow, setose distally; right valva: narrow at base, widened to apex; apex with anterior half deeply concave, produced to a setose triangular process dorsoapically, posterior half truncate, setose; costa setose distally; sacculus narrow, setose distally. Saccus shorter than uncus, slightly narrowing to rounded apex. Juxta wide at base, narrowing to furcate apex; basal lobe slender, clubbed, shorter than saccus. Aedeagus longer than left valva, almost uniform except narrowed from a short distance before apex; cornutus strong, thorn-shaped.

**Female genitalia** (Fig. 5D). Apophyses anteriores stronger, about 1/3 length of apophyses posteriores. Eighth tergum with two spines on posterior margin. Antrum shorter than long, extended and narrowed ventrolaterally. Ductus bursae with basal 1/6 wide and membranous, narrowed and sclerotized from basal 1/6 to beyond middle, wrinkled and membranous distally, with eight large thorns at beginning of sclerotization. Corpus bursae elongate, sub-ovate, shorter than ductus bursae; signum absent.

**Distribution.** Malaysia.

**Etymology.** The specific epithet of the new species is derived from the Latin *octacanthus*, referring to the eight thorns in the ductus bursae.

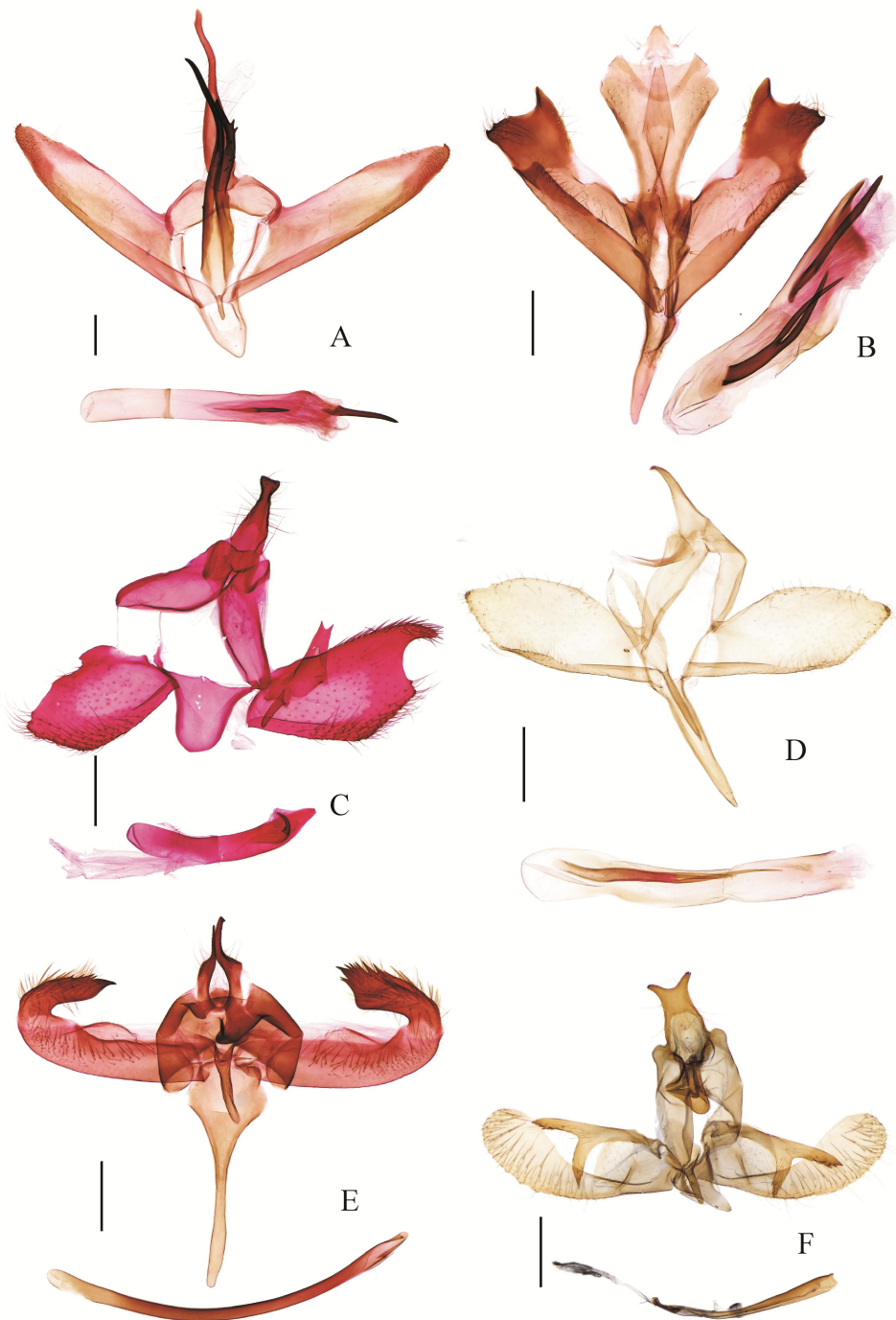


Figure 4. Male genitalia of *Promalactis* spp. A. *P. curviunca* sp. nov., holotype, slide No. JYY17630; B. *P. circulignatha* sp. nov., holotype, slide No. JYY17656; C. *P. octacantha* sp. nov., holotype, slide No. JYY17643; D. *P. folivalva* sp. nov., holotype, slide No. JYY17897; E. *P. disparatunca* sp. nov., holotype, slide No. JYY17633; F. *P. magnifurcata* sp. nov., holotype, slide No. JYY17916. Scale bars = 0.2 mm.



10. *Promalactis folivalva* Wang sp. nov. (Figs. 2D, 4D)

Diagnosis. This new species can be distinguished from other known *Promalactis* species by having a simple foliate valva and the cornutus with three distal spines of different length in the male genitalia.

**Holotype.** ♂, **Malaysia**, Mt. Trusmadi, Sabah, Malaysia, 1223 m, 20-VII-2018, coll. Kaijian TENG, slide No. JYY17897. **Paratypes.** 6♂, 17–21-VII-2018, other same data as holotype, slide Nos. JYY17896♂, JYY17971♂.

Description. Adult (Fig. 2D) wingspan 9.5 mm. Head with vertex creamy white, frons silvery grey, occiput rust brown. Labial palpus with second segment rust to blackish brown on outer surface, orange yellow on inner surface, with a white dot before apex; third segment black, white basally and distally. Antenna with scape creamy white; flagellum blackish brown, annulated with white on dorsal surface. Thorax and tegula rust brown. Forewing rust yellow, darker between basal and antemedian fasciae; markings white edged with black scales: costal spot placed at distal 1/3, sub-ovate, extending inward to lower margin of cell before lower angle, with grouped black scales on inner side anteriorly and on outer side posteriorly; basal fascia slender, from above base of fold to basal 1/5 of dorsum; antemedian fascia from before basal 1/4 of costal margin to basal 3/5 of dorsum, obliquely outward, slightly sinuate, parallel with basal fascia, wider anteriorly; dorsal streak from before end of fold oblique outward to before lower angle of cell, straight; apical spot small, ovate, with dense black scales on its inner margin; cilia blackish brown along distal part of costal margin and on tornus, yellow around apex, rust yellow tinged with greyish brown before apex along termen. Hindwing and cilia greyish brown. Fore- and midlegs black, fore tibia with a small white tuft at apex, mid tibia white at base, with a white tuft at apex, tarsi white at apices of basal two tarsomeres and distal tarsomere; hindleg earth yellow ventrally, greyish brown dorsally, tarsus earth yellow at apex of each tarsomere.

Male genitalia (Fig. 4D). Uncus wide at base, narrowed to hooked apex. Gnathos elongate, basally narrow and sclerotized laterally, distally widened and almost membranous; gnathos arms shorter. Tegumen branched from near posterior margin, narrowed anteriorly to rounded apex. Valva foliate, widened medially, narrowed to pointed and hooked apex, sparsely setose; costa arched. Sacculus wide at base, narrowed and setose distally. Saccus approximately 1.3 times as long as uncus, slightly narrowed to pointed apex. Juxta Y-shaped, lateral lobes narrowed to pointed apex; basal lobe slender, clubbed, pointed at apex, half length of saccus. Aedeagus approximately 1.3 times length of valva, almost uniform; cornutus about 2/3 length of aedeagus, distal half being three distal spines of different length, longest one about four times length of the shortest one.

Female unknown.

Distribution. Malaysia.

Etymology. The specific epithet of the new species is derived from the Latin *foli-* and *valva*, referring to the shape of the valva.

11. *Promalactis disparatunca* Wang sp. nov. (Figs. 2E, 4E)

Diagnosis. This new species is most similar to *P. liovskyi* Wang, 2018 in appearance and in the male genitalia. It can be distinguished from *P. liovskyi* by the unequal lateral arms of the uncus, and the inwardly curved free distal process of the valva being nearly half as long as

the valva; in *P. hvovskyi*, the uncus arms are equal in length and the shorter free distal process is about 1/3 the length of the valva.

**Holotype.** ♂, **Malaysia**, Mt. Trusmadi, Sabah, Malaysia, 1223 m, 10-II-2018, coll. Mujie QI, slide No. JYY17633. **Paratypes.** 2♂, 19–20-VII-2018, coll. Kaijian TENG, other same data as holotype, slide No. JYY17898.

**Description.** Adult (Fig. 2E) wingspan 9.0 mm. Head with vertex creamy white, frons silvery grey, occiput rust brown. Labial palpus with second segments orange yellow on inner surface, blackish brown on outer surface; third segment black except white dorsobasally, almost as long as second segment. Antenna dark brown, annulated with white dorsally. Thorax and tegula bluish brown. Forewing orange yellow; dorsum with a wide blackish brown sub-triangular stripe along basal 2/5, obliquely straight white line along its outer margin edged with black scales; median fascia blackish brown, mixed with rust scales, oblique outward, its inner margin with a white streak edged with black scales, extending from dorsum to about middle of upper margin of cell; costal spot white, lunate, curved inward, extending from beyond median fascia to above lower angle of cell; ill-defined shining orange yellow spot between costal spot and apical patch; apical patch blackish brown, ill-defined; cilia deep grey except orange yellow along anterior half of termen. Hindwing and cilia grey. Fore- and midlegs with dorsal side earth yellow, ventral side black, with two white dots on fore tibia, tarsi white at apices of basal three tarsomeres; hindleg yellow except tibia grey on dorsal side.

**Male genitalia** (Fig. 4E). Uncus separated from base; lateral arms unequal, finely serrate along outer margins: left arm shorter than right arm, abruptly narrowed and curved from beyond middle, spine-shaped distally; right arm with basal half uniformly wide, curved at middle, gradually narrowed from middle to apex, with an apical denticle at outside. Gnathos short, triangular, scobinate; right gnathos arm wide, left gnathos arm narrower and longer than right lateral arm. Tegumen relatively short, divided from middle, inverted V-shaped. Valva sub-rectangular, with a free distal process; free distal process curved toward base by an acute angle, slightly less than half length of valva, densely setose, with fine spines apically and laterodistally, right free distal process wider, slightly widened to before apex, then narrowed to apex, left free distal process narrower, narrowed distally. Costal area membranous. Saccus uniformly wide, about 2/3 width of maximum width of valva, setose. Saccus wide at base, narrowed to about middle; distal half slightly widened to before apex, twice length of right uncus arm, rounded apically. Juxta more or less Y-shaped; basal lobe clubbed, about half length of saccus. Aedeagus slender, arched medially, approximately twice length of saccus; cornutus absent.

Female unknown.

**Distribution.** Malaysia.

**Etymology.** The specific epithet of this new species is derived from the Latin *disparatus* and *uncus*, referring to the separated uncus.

## 12. *Promalactis magnifurcata* Wang sp. nov. (Figs. 2F, 4F, 5E)

**Diagnosis.** This new species can be distinguished from its congeners by the forewing with basal 2/5 orange yellow and distal 3/5 rust brown with grey scales, in the male genitalia by the large distally bifurcated lateral processes of the juxta, the large spatulate gnathos and the twisted valva.



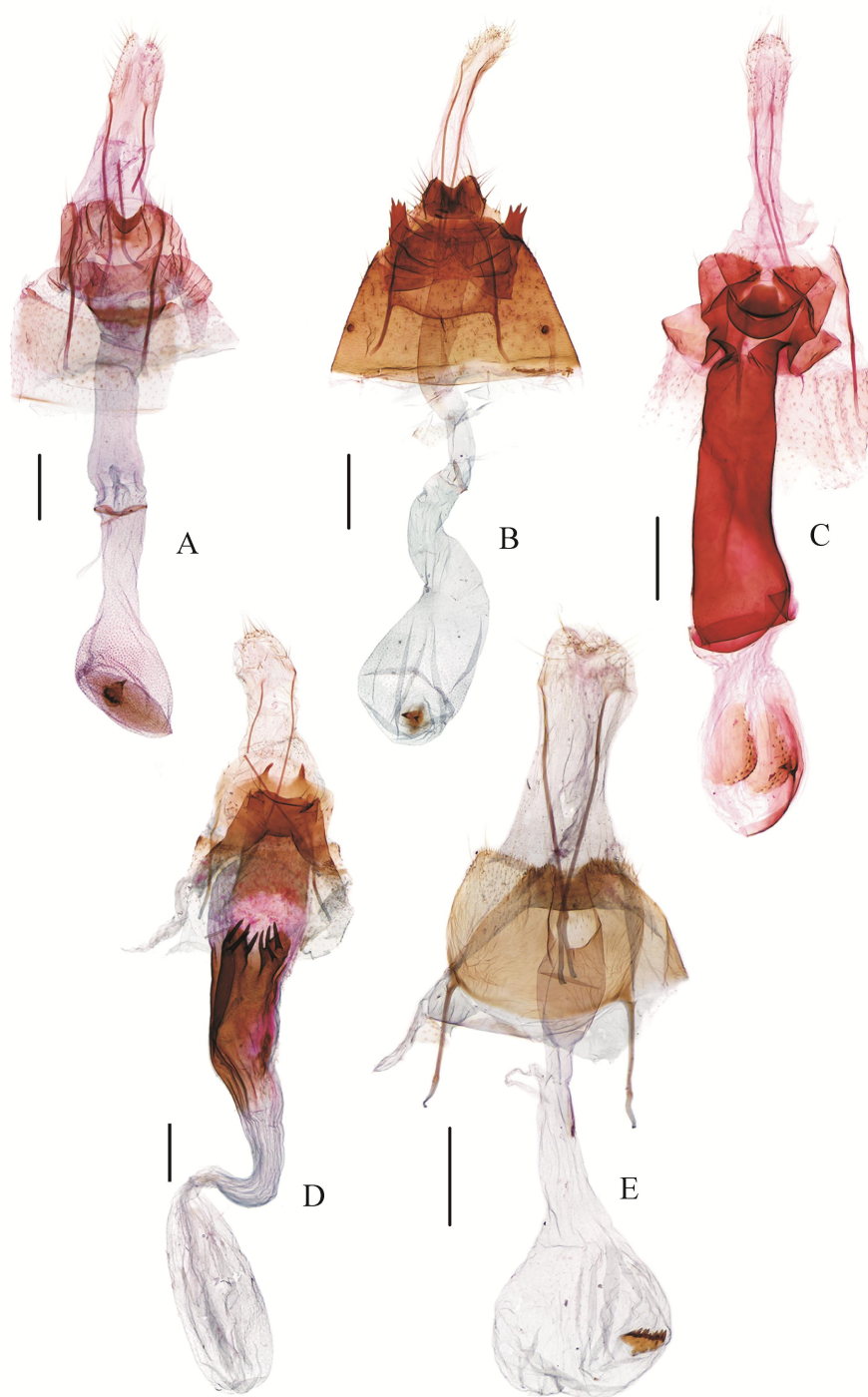


Figure 5. Female genitalia of *Promalactis* spp. A. *P. apicibilobata* sp. nov., paratype, slide No. JYY17624; B. *P. similitamdaoella* sp. nov., paratype, slide No. JYY17650; C. *P. serriprocessa* sp. nov., paratype, slide No. JYY17663; D. *P. octacantha* sp. nov., paratype, slide No. JYY17653; E. *P. magnifurcata* sp. nov., paratype, slide No. JYY17973. Scale bars = 0.2 mm.

**Holotype.** ♂, **Malaysia**, Mt. Trusmadi, Sabah, Malaysia, 1223 m, 18-VII-2018, coll. Kaijian TENG, slide No. JYY17916. **Paratypes.** 3♂1♀, 17, 21-VII-2018, other same data as holotype type, slide Nos. JYY17873♂, JYY17917♂, JYY17973♀.

**Description.** Adult (Fig. 2F) wingspan 8.5– 9.0 mm. Head with vertex creamy white, mottled silvery grey on frons, occiput brown. Labial palpus with second segment blackish brown on outer surface, orange yellow on inner surface; third segment black except white basally. Antenna with scape creamy white; flagellum blackish brown, annulated with white on dorsal surface. Thorax and tegula brown. Forewing with basal 2/5 orange yellow, with a blackish brown stripe along basal 1/4 of dorsum; distal 3/5 rust brown, mixed with black scales, with dense grey scales from distal part of costal margin along termen to beyond tornus; inverted U-shaped grey pattern set between middle and basal 2/3, its inner arm reaching before end of fold, outer arm reaching beyond tornus, anterior margin reaching upper margin of cell, partly diffused to costal margin; cilia dark greyish brown along distal part of costal and dorsal margins, orange yellow around apex. Hindwing and cilia blackish brown. Fore- and midlegs with dorsal side earth yellow, ventral side black, tibiae with white tuft at apex, tarsi white at apices of basal two tarsomeres; hindleg earth yellow ventrally, greyish brown dorsally, earth yellow at apex of each tarsomere.

**Male genitalia** (Fig. 4F). Uncus wide at base, narrowed to apex; apex bifurcate, forming two posterolateral lobes extending obliquely outward. Gnathos large, spatulate, widened laterobasally, narrowed to rounded apex, scobinate mediolongitudinally; gnathos arms shorter than gnathos. Tegumen branched from posterior 1/3, slightly narrowed to rounded apex. Valva wide at base, narrowed and twisted medially, slightly widened from middle to rounded apex, setose on ventral area. Saccus shorter than uncus, narrowed to pointed apex. Juxta wide at base, slightly narrowed to obtuse apex; lateral process arising from base, its basal 3/5 uniformly slender, distal 2/5 bifurcate, pointed at apex, serrate distally on ventral margins; basal lobe slender, clubbed, almost as long as saccus. Aedeagus shorter than valva, simple; cornutus absent.

**Female genitalia** (Fig. 5E). Apophyses posteriores approximately twice as long as apophyses anteriores. Eighth sternum concave at middle on posterior margin, with fine spines; eighth tergum sub-trapezoidal, finely serrate on posterior margin. Antrum enlarged medially, about half length of ductus bursae. Ductus bursae membranous; ductus seminalis from basal 1/4 of ductus bursae. Corpus bursae membranous, rounded, as long as or slightly shorter than corpus bursae; signum being a lanceolate plate bearing denticles, distinctly larger and denser on posterior margin.

**Distribution.** Malaysia.

**Etymology.** The specific epithet of this new species is derived from the Latin *magni-* and *furcatus*, referring to the distally bifurcate lateral process of the juxta.

### Checklist of the genus *Promalactis* Meyrick, 1908 from Malaysia

1. *P. alveiformis* Wang, Du & Li, 2013

*Zootaxa*, 3669(4): 407. TL: Malaysia (Borneo). TD: MNHU.

**Distribution.** Malaysia (Borneo).

2. *P. apicibilobata* Wang **sp. nov.**

Distribution. Malaysia (Sabah).

3. *P. conicispinalis* Wang, Du & Li, 2013

*Zootaxa* 3669(4): 410. TL: Malaysia (Sabah). TD: BMNH.

Distribution. Malaysia (Sabah).

4. *P. diehli* Lvovsky, 2000

*Entomologicheskoe Obozrenie*, 79(3): 682. TL: Indonesia (Sumatra). TD: SMNK.

Distribution. Malaysia, Indonesia (Sumatra).

5. *P. disparatunca* Wang **sp. nov.**

Distribution. Malaysia (Sabah).

6. *P. fascisetacea* Wang, Du & Li, 2013

*Zootaxa* 3669(4): 413. TL: Malaysia (Pahang). TD: MNHU.

Distribution. Malaysia.

7. *P. folivalva* Wang **sp. nov.**

Distribution. Malaysia (Sabah).

8. *P. foraminulata* Wang, Du & Li, 2013

*Zootaxa* 3669(4): 416. TL: Malaysia (Pahang). TD: BMNH.

Distribution. Malaysia (Pahang, Taiping).

9. *P. magnifurcata* Wang **sp. nov.**

Distribution. Malaysia (Sabah).

10. *P. jongi* Lvovsky, 2000

*Entomologicheskoe Obozrenie*, 79(3): 678. TL: Malaysia. TD: RMNH.

Distribution. Malaysia (Sabah), Indonesia (Bukit Burung).

11. *P. latericlavata* Wang **sp. nov.**

Distribution. Malaysia (Sabah).

12. *P. curviunca* Wang **sp. nov.**

Distribution. Malaysia (Sabah).

13. *P. medispinata* Wang, Du & Li, 2013

*Zootaxa*, 3669(4): 421. TL: Malaysia (Borneo). TD: MNHU.

Distribution. Malaysia (Borneo).

14. *P. nabokovi* Lvovsky, 2000

*Entomologicheskoe Obozrenie* 79(3): 667. TL: Indonesia (Sumatra). TD: SMNK.

Distribution. Indonesia (Sumatra), Malaysia (Borneo).

15. *P. octacantha* Wang **sp. nov.**

Distribution. Malaysia (Sabah).

16. *P. palmifolia* Wang, Du & Li, 2013

*Zootaxa*, 3669(4): 422. TL: Malaysia (Pahang). TD: BMNH.

- Distribution. Malaysia (Pahang).
17. *P. quinacuspis* Wang **sp. nov.**  
Distribution. Malaysia (Sabah).
  18. *P. circulignatha* Wang **sp. nov.**  
Distribution. Malaysia (Sabah).
  19. *P. semiovata* Wang, Du & Li, 2013  
*Zootaxa*, 3669(4): 425. TL: Malaysia (Pahang). TD: MNHU.  
Distribution. Malaysia (Pahang).
  20. *P. serriprocessa* Wang **sp. nov.**  
Distribution. Malaysia (Sabah).
  21. *P. similiflora* Wang, 2006  
*Oecophoridae of China (Insecta: Lepidoptera)*: 58. TL: China (Zhejiang). TD: NKU.  
Distribution. China (Anhui, Guizhou Hubei, Hunan, Jiangxi, Sichuan, Zhejiang); Malaysia (Borneo).
  22. *P. similitamdaoella* Wang **sp. nov.**  
Distribution. Malaysia (Sabah).
  23. *P. spinosicostalis* Wang, Du & Li, 2013  
*Zootaxa*, 3669(4): 428. TL: Malaysia (Borneo). TD: MNHU.  
Distribution. Malaysia (Borneo).
  24. *P. strenna* Wang, Du & Li, 2013  
*Zootaxa*, 3669(4): 429. TL: Malaysia (Pahang). TD: BMNH.  
Distribution. Malaysia (Pahang).
  25. *P. trigonilancis* Kim, 2017  
*Journal of Natural History* 51(29–30): 1683. TL: Indonesia (Sumatra). TD: MGCL.  
Distribution. Indonesia (Sumatra); Malaysia (Sabah).
  26. *P. trigonilobata* Wang **sp. nov.**  
Distribution. Malaysia (Sabah).
  27. *P. truncatapicalis* Wang, Du & Li, 2013  
*Zootaxa*, 3669(4): 431. TL: Malaysia (Borneo). TD: MNHU.  
Distribution. Malaysia (Borneo).
  28. *P. undulata* Wang, Du & Li, 2013  
*Zootaxa*, 3669(4): 432. TL: Malaysia (Pahang). TD: MNHU.  
Distribution. Malaysia (Pahang).

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